Grade 6 Math – The International School of Beijing

Unit 5: Fractions and Percent

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| **Topic 1: Review of Fractions** | |
| **Objectives** | Students should be able to   * Identify the parts of a fraction * Write equivalent fractions * Change between improper fractions and mixed numbers * Simplify fractions |
| **Guiding Questions** | What is a fraction?  Why do we need to write equivalent fractions?  What is the difference between mixed numbers and improper fractions?  How do I simplify a fraction? |
| **Resources** | New Signpost 7 Chapter 11 – Fractions, Percentages and Probability  11:01 Exploring Fractions  11:02 Comparing Fractions  11:03 Review of Fractions    Vocabulary  fraction • equivalent fractions • numerator • denominator • common denominator • improper fraction • mixed number |
| **Topic 2: Operations with Fractions** | |
| **Objectives** | Students should be able to   * Add and subtract fractions with like and unlike denominators * Multiply fractions and mixed numbers by first cross simplifying the factors first * Divide fractions and mixed numbers * Write a quantity as a fraction of another quantity |
| **Guiding Questions** | How do solve equations with fractions or mixed numbers?  Is there a set of rules I can create to solve equations with fractions or mixed numbers?  What is the easiest way to simplify an equation in order to solve it? |
| **Resources** | New Signpost 7 Chapter 11 – Fractions, Percentages and Probability  11:04 Addition and Subtraction of Fractions  11:05 Addition and Subtraction of Mixed Numbers  11:06 Multiplication of Fractions  11:07 Division involving Fractions  11:08 Fractions of Quantities  Vocabulary  lowest common denominator • reciprocal • invert |

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| **Topic 3: Review of Percentage** | |
| **Objectives** | Students should be able to   * Define percentage * Write a fraction or mixed number as a percentage * Write a percentage as a fraction or mixed number * Change a percentage to a decimal * Change a decimal to a percentage |
| **Guiding Questions** | What is percent?  How can I write a fraction or decimal as a percentage?  How can I write a decimal or fraction as a percentage? |
| **Resources** | New Signpost 7 Chapter 11 – Fractions, Percentage and Probability  11: 09 Review of Percentage  11:10 Changing Fractions and Decimals to Percentages  11:11 Changing Percentages to Fractions and Decimals  Vocabulary  percentage |
| **Topic 4: Percent Applications** | |
| **Objectives** | Students should be able to   * Find the percent of a quantity * Write one quantity as a percentage of another quantity * Use percent calculation so solve word problems |
| **Guiding Questions** | How do we express one quantity as a percentage of another quantity?  How do we express a quantity as a percentage?  How is percentage used in daily life applications? |
| **Resources** | New Signpost 7 Chapter 11 – Fractions, Percentage, and Probability  11:12 Percent of a Quantity  11:13 One Quantity as a Percentage of Another  11:14 Applications of Fractions and Percentages |